



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,208	03/26/2004	Yuen Fai Wong	019959-004200US	8639
20350 7590 09/13/2010 TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			EXAMINER PATEL, CHANDRAHAS B	
			ART UNIT 2464	PAPER NUMBER
			MAIL DATE 09/13/2010	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Supplemental
Notice of Allowability**

Application No.

10/810,208

Examiner

Chandrabhas Patel

Applicant(s)

WONG ET AL.

Art Unit

2464

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/13/2010.
2. ☒ The allowed claim(s) is/are 1-22,24-30,32-47,72-75,77-80 and 82-84.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 6/6/2008, 8/13/2010
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date ____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

/Chandrabhas Patel/
Examiner, Art Unit 2464

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 8/13/2010 was filed after the mailing date of the Notice of Allowance on 7/15/2010. The submission is in compliance with the provisions of 37 CFR 1.97 and specifically 37 CFR 1.97(e). Accordingly, the information disclosure statement is being considered by the examiner.

Allowable Subject Matter

2. Claims are 1-22, 24-30, 32-47, 72-75, 77-80, 82-84 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Regarding claim 1, prior art and IDS filed on 8/13/2010 fail to teach an aggregation module coupled to the plurality of ingress data ports and configured to receive the plurality of input data streams from the first processors using the plurality of ingress data ports, wherein an input data stream from a first processor is received via the ingress data port coupled to the first processor, the aggregation module adapted to analyze and combine the plurality of input data streams into one aggregated data stream in response to the at least one priority factor and to generate a packet descriptor comprising a reference to a memory location of its analyzed data packet; the memory comprising a plurality of priority queues each provided for a corresponding priority class, adapted to store the packet descriptor of each of the analyzed data packets classified to the corresponding priority class, the packet descriptor containing a reference to the memory location of its analyzed data packet in the memory.

Regarding claim 20 prior art and IDS filed on 8/13/2010 fail to teach a packet analyzer adapted to classify each of the ingress data packets into one of predetermined priority classes based on the at least one priority factor; a queue module comprising a plurality of priority queues each provided for the corresponding priority class, adapted to store a packet descriptor of each of the analyzed data packets classified to the corresponding priority class, the packet descriptor containing a reference to a memory location of its analyzed data packet in the memory, and a selection logic implementing a queue scheme, adapted to arbitrate and select a packet descriptor from among the priority queues; a read interface coupled to the queue module, adapted to read a data packet corresponding to the selected packet descriptor from the memory; and an output module to send the data packets read from the memory to the second data link as the aggregated data stream.

Regarding claim 32, prior art and IDS filed on 8/13/2010 fail to teach generating a packet descriptor for the analyzed ingress data packet, the packet descriptor containing a reference to a memory location of its analyzed data packet stored in the memory; placing the packet descriptor in a priority queue corresponding to the priority class of the data packet; arbitrating and selecting a packet descriptor from among the priority queues using selection logic implementing a queue scheme; reading a data packet corresponding to the selected packet descriptor from the memory.

Regarding claims 46, 47, 75 and 80, prior art and IDS filed on 8/13/2010 fail to teach generating a packet descriptor for the analyzed ingress data packet, the packet

Art Unit: 2464

descriptor containing a reference to a memory location of its analyzed data packet stored in a memory.

This taken with all other limitations of dependent claims is considered novel and non-obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrahas Patel whose telephone number is (571)270-1211. The examiner can normally be reached on Monday through Thursday 7:30 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Application/Control Number: 10/810,208

Page 5

Art Unit: 2464

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art
Unit 2464

/Chandrabhas Patel/
Examiner, Art Unit 2464